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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,697	12/27/2004	Ryuya Tachino	275854US6PCT	7279
22850 7590 07/17/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER NGUYEN, LINH THI	
			ART UNIT 2627	PAPER NUMBER
			NOTIFICATION DATE 07/17/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/519,697	<b>Applicant(s)</b> TACHINO ET AL.	
	<b>Examiner</b> Linh T. Nguyen	<b>Art Unit</b> 2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 28-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 28, 29, 31, 32, 34, 38, 39, 41, 42, 44, 46, 48, 49 and 51 are rejected under 35 U.S.C. 102(e) as being unpatentable by Van Woudenburg (US Patent Number 7215634).

In regards to claims 28 and 45 Van Woudenburg discloses an optical recording medium and method in which write-once or rewrite operation of data can be performed with block including a group of data being as unit, wherein buffer areas (PoA and G2 or PrA and G1) for random access are respectively disposed before and after respective blocks (Fig. 7, G1 and G2 are disposed before and after the data area), whereby when new block (the data block after PrA) is recorded a start point for a buffer area (Fig. 7) before the new block is not fixed relative to an existing block preceding the new block (Column 9, lines 25-32) and the new block is recorded in the state where the buffer area provided with respect to the block and the buffer area provided with respect to existing block adjacent to the new block overlap with each other (Fig. 7).

In regards to claims 29 and 46, Van Woudenburg discloses the optical recording

Art Unit: 2627

medium and method, wherein recording unit block is constituted by block (data) and the buffer areas (PrA and G1) before and after the block (Fig. 7), and guard area (G1 or G2) or areas is or are provided at the rear portion of one recording unit block or at the rearmost portion of successive plural recording unit blocks (Fig. 7).

In regards to claims 31, 41 and 48, Van Woudenburg discloses the optical recording medium, apparatus and method, wherein the buffer area or areas disposed immediately before or immediately after block (Fig. 3), or immediately before and immediately after block includes or include guard area (G1 and G2) for overlap at the time of recording (Fig. 7), and signal pattern for automatic adjustment according to power of light source is recorded within the guard area (Fig. 6).

In regards to claims 32, 42, and 49, Van Woudenburg discloses the optical recording medium, apparatus and method, wherein the buffer area disposed immediately before block includes guard area for overlap at the time of recording (Fig. 7, Column 9, lines 25-32), and preamble for signal processing (Fig. 7, PrA), and plural synchronization patterns (Column 2, lines 42-46) having distances and identification information which are different from each other are recorded at the preamble (It is inherent that the preamble contains identification information).

In regards to claims 34, 44, and 51, Van Woudenburg discloses the optical recording medium, apparatus and method, wherein the buffer area disposed

Art Unit: 2627

immediately after block includes postamble for time adjustment of signal processing (PoA), and guard area for adjustment of recording end position (G2), and signal pattern for detecting reproduction end of the block is recorded at the postamble (Fig. 7).

In regards to claim 38, Van Woudenburg discloses an information processing apparatus (Fig. 1) adapted for performing recording or reproduction of information with respect to an optical recording medium in which write-once or rewrite operation of data can be performed with block including a group of data being as unit (Fig. 7), the information processing apparatus including data recording means for generating recording channel data in which buffer areas for random access are added before and after respective blocks to record the data onto an optical recording medium (Fig. 1 element 36), wherein when recording of new block is started with respect to a first block and a second block which have been already recorded (Column 9, lines 47-52), the block is recorded in the state where the buffer area disposed immediately before the block and the buffer area disposed immediately after the first block adjacent to the block overlap with each other (Fig. 7), and when recording of block is completed, the block is recorded in the state where the buffer area disposed immediately after the block and the buffer area disposed immediately before the second block adjacent to the block overlap with each other (Column 7, lines 25-32) .

In regards to claim 39, Van Woudenburg discloses the information processing apparatus as set forth in claim 11, wherein recording and reproduction are performed

Art Unit: 2627

with recording unit block including block the buffer areas (PrA and G2 or PoA and G1) before and after the block being as processing unit (Fig. 7), and guard area or areas is or are provided at the rear portion of one recording unit block (Fig. 7), or at the rearmost portion of successive plural recording unit blocks at the time of recording of recording channel data (Fig. 6).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30, 33, 35-37 40, 43, 47, 50 and 52-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Woudenburg '634 in view of Van Woudenburg et al (US Patent number 6724707). For the description of '634 rejection see, supra.

In regards to claims 30, 40 and 47, Van Woudenburg '634 discloses the optical recording medium, apparatus and method, wherein the buffer area disposed immediately before block includes guard area (G1 or G2) for overlap at the time of recording (Fig. 7). However, '634 does not discloses preamble for signal processing, and signal patterns for frequency pull-in of Phase Locked Loop (PLL) at the time of data reproduction and Auto Gain Control (AGC) are recorded at the guard area or the preamble.

Art Unit: 2627

In the same field of endeavor, Van Woudenberg et al discloses preamble for signal processing (Fig. 2, header area), and signal patterns for frequency pull-in of Phase Locked Loop (PLL) at the time of data reproduction and Auto Gain Control (AGC) are recorded at the guard area or the preamble (Column 6, lines 42-54). At the time of the invention it would be obvious to a person of ordinary skill in the art to modify '634 optical recording medium to reproduce a signal patterns for frequency pull-in Phase Locked Loop and Auto Gain Control of Van Woudenberg et al. The motivation for doing so would have been to provide a medium which comprises a synchronization pattern to ensure optimized of an automatic gain control (Column 2, lines 43-47).

In regards to claims 33, 43 and 50, '634 discloses the optical recording medium, apparatus and method, wherein the buffer area disposed immediately after block includes postamble for time adjustment of signal processing, and guard area for adjustment of recording end position (Fig. 7).

'634 does not but Van Woudenberg et al discloses a signal pattern for Phase Locked Loop (PLL) according to reproduction clock is recorded at the postamble (Column 7, lines 31-43). The motivation is as same as above.

In regards to claims 35, 36, 37, 52, 53 and 54, '634 does not but Van Woudenberg et al discloses the optical recording medium and method, wherein the signal pattern is repetitive pattern of 3T/3T/2T/2T/5T/5T (Column 5, lines 30-33). At the time of the invention it would have been obvious to a person of ordinary skill in the art to

Art Unit: 2627

include '634 optical recording medium with a signal pattern of 3T/3T/2T/2T/5T/5T of Van Woudenberg et al. The motivation for doing so would have been to ensure an optimized setting of AGC amplifier (Column 2, lines 44-47).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh T. Nguyen whose telephone number is 571-272-5513. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LN

June 30, 2007

  
WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER